Formatted: Different first page header

~~10~~ 14 November 2011

OWTS Policy, Division of Water Quality
State Water Resources Control Board
P.O. Box 2231, Sacramento, CA 95812

Reference: Public Comment - Draft Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems, draft release date 30 September 2011, prepared by the California State Water Resources Control Board.

To whom it may concern:

Formatted: Justified

I am a Certified Engineering Geologist and a Certified Hydrogeologist with more than twenty years of experience designing onsite wastewater disposal systems for residential, commercial, and educational facility projects. Over the years, I have been the project manager for onsite waste waster disposal feasibility studies for residential subdivision projects. ~~The Surveyors, Architects, Geologists, and Engineers (SAGE) of El Dorado County is a group of public and private sector professionals who are frequently called upon to review proposed policies at the local and statewide levels. Many of our members are multidisciplinary technical experts in many fields, one of which happens to be the design of onsite wastewater disposal systems. Many of our members work in multiple jurisdictions in California and recognize the wide variability in onsite wastewater disposal systems standards statewide.~~I have experienced the frustration of widely variable standards from County to County ~~We recognize~~ and appreciate the State Water Resources Control Board's desire to have a more uniform statewide policy. ~~We~~ I have reviewed the above referenced document (Policy) and provide the following observations.

For new systems, the Policy will eventually group the majority of systems into either a Tier 1 or Tier 2 description; Tier 3 being for systems near impaired waters (there are currently few impaired water bodies in El Dorado County); Tier 4 being for systems needing repair; and Tier 0 being for existing functioning systems (grandfathered in). A very large number of parcels and existing septic systems have been developed or designed in El Dorado County using the current local standards which are in compliance with the Basin Plan. The Tier 1 Standards are substantially more restrictive than the current standards. For example, the wastewater application rates in the Policy for a given percolation test rate are far smaller than the current standards and the Policy limits trench area for application to a maximum of four square feet per lineal foot of trench, regardless of trench depth. The upper percolation rate for the Policy is 90 minutes per inch equating to ~~an application~~an application rate of 0.1 gallons per square foot of disposal area per day. El Dorado County's current maximum percolation rate of 240 minutes per inch equates to an application rate of 0.3 gallons per square foot per day. A typical 5-foot deep trench currently has 7 square feet of trench per lineal ~~foot for~~foot for the application of wastewater under current El Dorado County Standards. Properly constructed systems designed to the current El Dorado County standard have been found to function properly. However, existing properties with percolation rates slower than 90 minutes per inch, where the ~~EL~~El Dorado County standard would allow construction, may become completely unbuildable under the proposed standards.

For existing properties with a passing percolation rate, the size of the required leach fields could more than double in spite of there being no sound technical reason for the increase in system size. The Tier 1 standards will result in a very large number of currently buildable lots with conditions where systems built to current standards have been demonstrated to work properly becoming unbuildable it required to comply with the new standards.

Tier 0 existing systems that need repair will be placed into a Tier 4 class. The repairs will have to be to standards for Tiers 1 through 3. This could make many facilities (homes, commercial buildings, schools, governmental, health care, etc.) unrepairable and could force the abandonment or closure of valuable and/or necessary property.

Tier 2 is for systems following local agency standards. These standards will have to be approved by the State Water Resources Control Board before they can be implemented. We have no assurance that any such standards for local agencies have to be approved; perhaps the State Water Resources Control Boards could just reject proposed policies that they do not agree with and force a local agency into applying only the Tier 1, Tier 3, and Tier 4 standards. At this point we have no idea of what will be required for systems under the oversight of local agencies although we can guess that it will be somewhat less restrictive then the Policy for Tier 1. That still does not define the impact of the adoption of the Policy on local agencies. It is clear from the draft Policy that there will be a tremendous amount of record keeping, data transmittal, and reporting required of those local agencies that elect to establish a Tier 2 policy and is approved by the State Water Resources Control Board. There will be substantial cost to local agencies to implement these requirements. It is our opinion that two significant factors in systems not performing as required are that they are not constructed as per the system design and they are not adequately maintained.

~~We~~ I make the following recommendations:

1) Any ~~policy address~~policy addresses verification that systems are constructed as per the system design and that they are adequately maintained.

2) Prior to implementation of the overall Policy, create one or more model Tier 2 policies acceptable to the State Water Resources Control Board for review and comment.

3) Consider a revised policy that defines basic site assessment and design procedures (i.e. how to complete a percolation test), but leaves more in depth restrictions up to local agencies (i.e. acceptable percolation rates and application rates).

Thank you for the opportunity to provide the above comments.

David C. Sederquist, P.G., C.E.G., C.HG.
~~Chairman Environmental Science Committee~~
~~Surveyors, Architects, Geologists, and Engineers of El Dorado County.~~

David C. Sederquist, P.G., C.E.G., C.HG.
P.O. Box 669, Diamond Springs, CA 95619
dcsederq@pacbell.net

Formatted: Centered